DON'T BE AN INTERNET TURKEY

Backing Up Your Important Data

Why should you back up your data?

Computer hard disk drives have a hard time of it, spinning round for eight hours or more a day, heating up and cooling down, experiencing the odd physical knock, constantly having data written or erased ... and all of this happening inside a hot metal case with electricity coursing in all directions. It goes without saying that sometimes your drive is not going to survive this hostile environment. Recovering data from a hard disk which has failed is an expensive process.

As if the threat of hardware failure was not enough, you must also contend with the possibility of virus attack. There has been a surge in the number of e-mail viruses in recent months and there have been numerous instances where a lapse in concentration, or clicking a button on a dialogue box without reading the message displayed, has led to F-Secure deleting the entire contents of the email inbox because someone has sent a virus to you via e-mail. In addition the seemingly constant assaults on Microsoft's security failings have led to ever-more sophisticated Internet viruses being unleashed on PC users.

Of course, you could disconnect your PC from the network, never use the Internet, and refuse to read any disks given to you by others. You would almost certainly remain virus-free but you wouldn't be very productive at work. A safer alternative is to accept that computers will break down, and that being infected by a computer virus is a probability, so planning a means of minimising the effects of a malicious attack or system failure is a good idea. Although Macintosh computers are largely unaffected by virus attacks they are not immune to hardware failure so backing up data is just as relevant to these computer users as well.

All this doom and gloom could be hard to take but, with a little planning and some time spent on a regular basis, you can reduce the potential disaster of hardware failure or virus attack to a mere inconvenience. To add a reasonable level of protection to your PC there are three things all PC users must do on a regular basis:

1) Keep anti-virus databases and virus strings up to date

2) Install all Microsoft critical updates and patches as soon as they become available

3) Regularly back up important data held on your own machine

Here we should point out the difference between a backup and an archive. Backups are short-term copies of current data to be used in the event of an accident or hardware failure, and archives are long-term copies of data which may or may not be current, but are important to you. For true archiving purposes you should not compress the data since this is likely to impose upon it a format which may be unreadable in years to come.

This article is not about archives, but offers practical advice about making backup copies.

Backing up the data on your own PC or Macintosh computer is your responsibility. With a little thought a regular backup routine can be initiated, with minimal intrusion on your working day.

What data should you back up?

If you are a PC user, you should regularly back up your My Documents folder and your mailboxes as a matter of course. You should also identify any other data which is critical to your work and back this up as well. When considering implementing backups you should try to place all of your important data, including your e-mail mailboxes, within the My Documents folder. This may mean you have to move your mailboxes and reconfigure your computer accordingly.

If you use a Macintosh computer you should identify and back up the folders where you store your data and mailboxes. As with PC users, you may wish to move your mailboxes and reconfigure your computer to make the backups easier.

What should you use to back up your data?

Many dedicated software packages are available to allow you to manage your backups at scheduled times. However, there can be pitfalls associated with using such software: the use of proprietary compression and encryption systems may lead to unrecoverable data should there be a version change in the backup-and-recovery software. In the past the Microsoft backup utility was notorious for producing backup files which could not be restored on later versions of Windows. However, in view of the large amount of data that we accumulate over the years there are still obvious advantages in storing it in compressed form on our backup media. There are various 'safe' data compression programs on the market, of which PKZIP and WinZip are the best known. These programs will compress your data files into a single file (often known confusingly as an 'archive'), and also provide a restoration facility so that you can extract particular files from the compressed file.

Backups can be implemented with easily obtainable software, using writeable CD or DVD disks as storage media. The cost per megabyte of backing up to CD or DVD disk is minimal and the hardware required is inexpensive.

As the cost of backup media is so low, we suggest that most users' needs will be satisfied by merely copying their data to CD or DVD disks on a regular basis. If you wish to regularly back up the same data the copying software will allow you to create and save a configuration file with details of the files to be copied. Before creating subsequent backups you open this file, automatically loading your file list, then click 'go'. Of course we are simplifying things a little, but once set up, most users will be able to make a copy of their valuable data in just a few minutes.

If your backup needs are larger or more sophisticated you could invest in an external hard drive.

If your backup needs are small then backing up your data to USB memory sticks may also be an option. USB memory sticks are suitable for short-term backups but are quite unsuitable for archiving material as there is a question-mark over their ability to retain data over a long period of time (editor’s comment – I have had USB drives go bad on me).